

## **REMARKS**

**The rejection of claims 82 to 85 as being anticipated by Kenley has been overcome by amendment and is traversed.**

The claims, as amended, require the following elements that are not disclosed in Kenely:

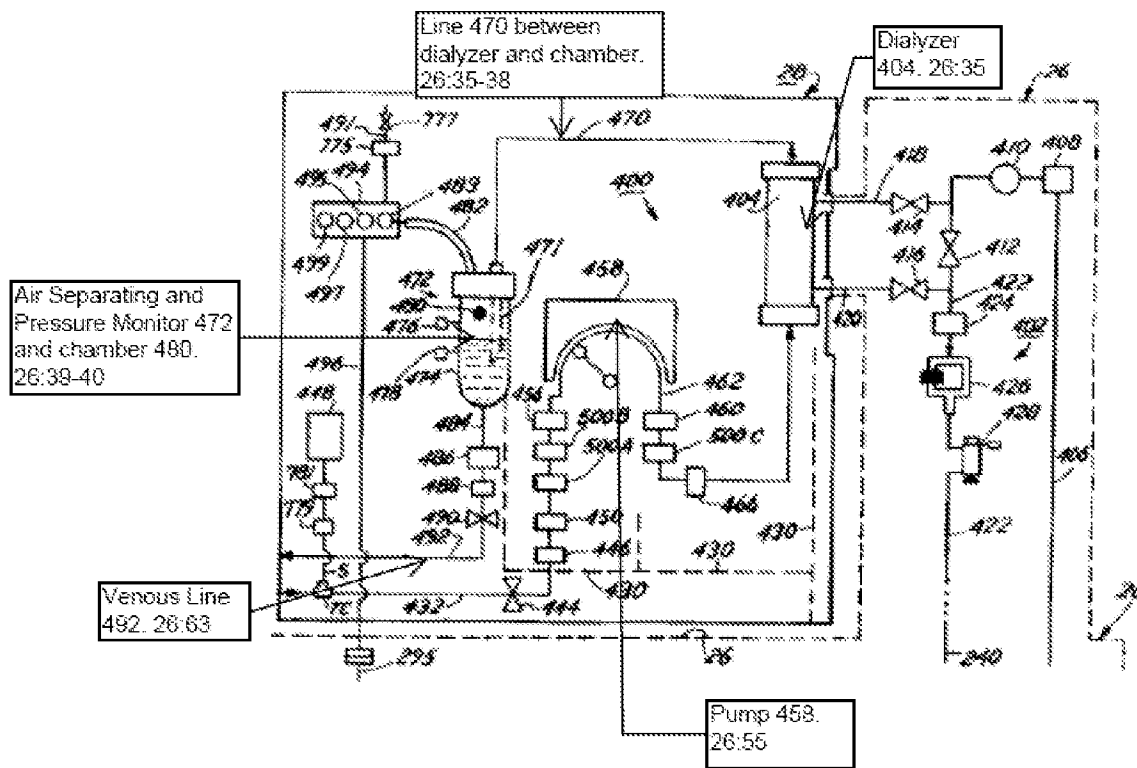
- a) return line directly connected to said at least one patient access forms a continuous fluid passage substantially free of gases, and
- b) a reverse flow in the return line and the patient access when the pump or pump actuator is reversed.

Kenley does not disclose a gas free return line that is directly connected to a patient access or provides reversal of blood flow in the patient access when the blood pump is reversed. The return line in Kenley is connected to an air separating and pressure monitoring device that has a gas area which is distinct from the gas free passage recited in the claims. Further, the gas area in the passage of Kenley and the clamp on the venous line 492 prevents reverse flow in the blood line 492 that is directly connected to a patient access.

The figure below is an annotated Figure 13 from Kenley et al and shows that the blood line 470 is not connected to a patient access.<sup>1</sup>

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<sup>1</sup> In the following figure, the references to the column and lines of Kenley et al are indicated in the text boxes.



The blood line 470 is separated by air separator 472 from the return line 492 which is connected to a patient access. The separator removes air in the blood line 470. Air bubbles may occur in the blood line 470. Blood flows from the outlet of line 470 and enters the chamber 480 of the separator 472. Air in the blood bubbles to the top of the chamber and is vented. Blood settles in the chamber and ultimately drains out of the chamber bottom and into return line 492.

When the Kenley pump is reversed, the blood line 492 is clamped shut to ensure that no blood is drawn out of the patient through the return line 492. Kenley, col. 26, lns. 57-60. The clamp prevents fluid flow through the return line 492 while the pump is reversed. Accordingly, the blood does not flow in a reverse direction through the patient

access or through the line 492 that is directly connected to the patient access when the blood pump is reversed.

In view of the amendments to claims 82 and 84, claims 82 to 85 are not anticipated by Kenley.

All claims are in good condition for allowance. If any small matter remains outstanding, the Examiner is requested to telephone applicants' attorney. Prompt reconsideration and allowance of this application is requested.

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

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